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What is claimed is:

1. A voice storage device comprising:  
a storage means that stores a voice signal, and  
a voice compression means that compresses the  
10 voice signal requiring a re-coding compression, of  
the voice signal stored in the storage means, in  
accordance with a compression degree and a  
significance of the voice signal.

15 2. A voice storage device as claimed in Claim 1,  
wherein the storage means stores the voice signal  
packetized by each coding type.

3. A voice storage device as claimed in Claim 1,  
20 further comprising a real time processing means that  
stores a voice signal in real time in the storage  
means, and a non-vocalization interval detection  
means that determines a significance of the voice  
signal in accordance with whether the voice signal  
25 corresponds to a vocalization interval or to a  
non-vocalization interval, at an independent timing  
from a processing by the real time processing means.

4. A voice storage device as claimed in Claim 3,  
30 wherein, when a voice signal stored in the storage  
means corresponds to the vocalization interval, the

non-vocalization interval detection means increases the significance of a voice signal before and after the vocalization interval.

5           5. A voice storage device as claimed in Claim 1, wherein the voice compression means compresses a voice signal in parallel to a storage of the voice signal in real time in accordance with a storage capacity of the storage means.

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          6. A voice storage device as claimed in Claim 1, further comprising a record means that records whether or not a voice signal is read more than once from the storage means, wherein the significance of  
15 a voice signal once read is decreased.

          7. A voice storage device as claimed in Claim 6, wherein, when the voice signal once read is read again, the significance is not changed.

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          8. A voice storage device as claimed in Claim 6, wherein, even when the significance of a voice signal is changed, whether the significance is changed or not is determined in accordance with a storage  
25 capacity of the storage means.

          9. A voice storage device as claimed in Claim 1, wherein the voice compression means includes a quantization table generation means that scans a  
30 voice signal stored in the storage means, and

generates a quantization table for a coding compression.

10. A voice storage device as claimed in Claim 5 9, wherein the quantization table is packeted to be stored in the storage means, when a voice signal is read from the storage means, if the quantization table is made from the voice signal, the voice signal is decoded by using the quantization table.

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11. A voice storage device as claimed in Claim 1, wherein the voice compression means executes a coding to a voice signal, in which the coding is divided into one using a code essential to decoding 15 the voice signal and another one using a code to improve a sound quality of a decoded voice.

12. A voice coding device comprising:

an LSP quantizer that quantizes LSP parameters;

20 an LSP multi-stage quantizer that quantizes quantization error components that the LSP quantizer is impossible to express;

a pitch component coder that attains pitch components from linear predictive errors;

25 an excitation source coder in which an excitation source is configured with a multi-stage code book;

an essential code output unit that outputs a code essential to decoding from the output of the LSP 30 quantizer, the pitch component coder, and the excitation source coder; and

a sound quality improving code output unit that outputs a code to improve a decoded sound quality from the output of the LSP multi-stage quantizer and the excitation source coder.

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